

## WPCR-501

### Wireless-N Notebook Adapter



**Up to 300Mbps data rate, 6x better performance**

SparkLAN WPCR-501 Notebook Adapter is IEEE 802.11n draft 2.0 compliant. It can deliver 6x better performance than normal 802.11g while fully backward compatible with conventional 802.11g gears. The Notebook Adapter integrated MIMO technology, which can enhance coverage range and throughput and save the cost to purchase additional devices to deploy household WLAN environment. The Wireless-N Notebook Adapter can achieve incredible transmission rate of up to 300Mbps, which allow you to stream bandwidth-sensitive applications, such as high-definition video, VoIP phone calls, movies, music, pictures, and online games.

#### Ensure your security and privacy

As the reach of your wireless network extends further, network security is a key factor. SparkLAN Cardbus combines 64/128 bit WEP Encryption, WPA, WPA2, and QoS for your laptop from hacker and intruders.

#### Product Highlights

- IEEE802.11n draft 2.0 compliant
- Delivers up to 300 Mbps data rate
- 6x better performance
- Ideal for bandwidth-sensitive application
- Designed to stream movies, music, photos, HD video, VoIP phone calls, and large file

#### Features

- MIMO technology
- Backward compliant with 802.11b/g
- Easy-to-install
- Support Window 2000/XP
- Advanced security: 64/128bit WEP, WPA, WPA2
- RF Chain: 2T3R for HT20,HT40, 1T3R for 802.11b/g mode

## Specifications

<b>Hardware</b>		<b>Power Consumption</b>
<b>Chipset</b>	Ralink RT2860 ( MAC/BBP ) and RT2820(RF)	
<b>Interface</b>	32-bit Cardbus	
<b>LED Indicators</b>	Power, Activity	
<b>Antenna</b>	2 dbit internal antenna	
<b>Radio Characteristics</b>		<b>802.11b</b>
<b>Standard</b>	IEEE draft 802.11n, 802.11b/g	Continue TX: 610@3.3V
<b>Frequency Band</b>	<b>802.11b</b> ISM band 2.400 ~ 2.484GHz (subject to local regulations) <b>802.11g</b> ISM band 2.400 ~ 2.484GHz (subject to local regulations) <b>802.11n draft</b> ISM band 2422 – 2452MHz (channel BW=40MHz) 2400 – 2483.5MHz (channel BW=20MHz)	Continue RX: 340@3.3V
<b>RF chain</b>	2T3R for HT20,HT40, 1T3R for 802.11b/g mode	<b>802.11g</b> 15dBm @ 54Mbps <b>802.11b</b> 17dBm@11Mbps <b>HT20</b> 13dBm@144Mbps <b>HT40</b> 11dBm@270Mbps
<b>Spreading</b>	<b>802.11b</b> : Direct Sequence Spread Spectrum (DSSS) <b>802.11g</b> :Orthogonal Frequency Division Multiplexing (OFDM) <b>HT20</b> : Orthogonal Frequency Division Multiplexing (OFDM) multiple-input/multiple-output (MIMO) <b>HT40</b> : Orthogonal Frequency Division Multiplexing (OFDM) multiple-input/multiple-output (MIMO)	<b>HT20</b> Continue TX: 700@3.3V Continue RX: 340@3.3V <b>HT40</b> Continue TX: 720@3.3V Continue RX: 340@3.3V
<b>Modulation</b>	<b>802.11g</b> G64 QAM, 16 QAM,QPSK, BPSK <b>802.11b</b> GCCK,DQPSK,DBPSK <b>HT20,HT40</b> 64 QAM, 16 QAM,QPSK, BPSK Data	<b>Software Features</b>
<b>Data Rate</b>	<b>802.11b</b> 11,5.5, 2, 1 Mbps per channel <b>802.11g</b> 54, 48, 36,24,18,12, 9, 6 Mbps per channel <b>HT20</b> 144, 130, 115, 86, 57, 43, 28, 14 Mbps <b>HT40</b> 270, 240, 180, 120, 90, 60, 30Mbps	<b>Security</b> <ul style="list-style-type: none"><li>● 64/128 WEP</li><li>● WPA, WPA2</li></ul> <b>Software Support</b> Windows 2000/XP
<b>Receive sensitivity</b>	<b>802.11g ( 3RX)</b> Nominal Temp Range: - 6Mbps @ -91dBm, typical, +/-2dBm - 54Mbps @ -72dBm, typical, +/-2dBm <b>802.11b</b> Typ. -85dBm@11Mbps, +/-2dBm Typ. -92dBm@1Mbps, +/-2dBm <b>HT20(3RX)</b> MCS=0 -87dBm, +/-2dBm MCS=15 -67dBm, +/-2dBm <b>HT40(3RX)</b> MCS=0 -85dbm, +/-2dBm MCS=15 -64dBm, +/-2dBm	<b>Environmental Specifications</b>
		<b>Dimensions</b> 120*49*8mm <b>Weight</b> 42g <b>Temperature</b> Operating: 0°C to 70°C Storage: -20°C to 80°C <b>Humidity</b> 90%,(non-condensing)
		<b>Power Supply</b>
		Output DC 3.3V
		<b>Certification</b>
		FCC, CE
		<b>Package Contents</b>
		Wireless-N Notebook Adapter CD-ROM (User Guide, Utility, QIG, User Manual)      Multi-Language Quick Installation Guide

**Specifications are preliminary and subject to change without notice**